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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/467,611	12/20/1999	GEORGE J. MIAO	INTL-0324-US	2610

7590 08/19/2005

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EXAMINER	
NGUYEN, DUNG X	

ART UNIT	PAPER NUMBER
2638	

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/467,611	MIAO ET AL.	
	Examiner	Art Unit	
	Dung X Nguyen	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 18 and 20 - 30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *16 - 18 and 20 - 30* is/are allowed.

6)☒ Claim(s) *1 - 4* is/are rejected.

7)☒ Claim(s) *5 - 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 December 1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments filed on April 29, 2005 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of new reference(s).

Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

3. **Claim 1 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Bertrand et al. (US patent # 6,487,221 B1), and further in view of Hellberg et al. (US patent # 6,611,855 B1).

Regarding claim 1, Bertrand et al. discloses (figure 4):

- First decimation filter (40_1) with N bands (column 8, lines 51 – 60); and
- Second decimation filter (40_2) coupled to the first digital filter (column 2, lines 28 - 49.

The limitation of "for implementing a Global System for Mobile communication mode' as recited in lines 3 and 4 is not given weight by the examiner because it relates to how the intends to use.

Bertrand et al. differs from the instant claimed invention that it does not state that a second decimation filter to reject N-1.

However, Hellberg et al. discloses (figure 3) that Fliter1 cascading to Filetr2 being different parameters as decimation factors, etc..., from the preceding information, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement Hellberg et al. to reject *N-1* bands. What is suggested in Hellberg is that cascaded filters can have different parameters. Hence it would have been obvious to one of ordinary skill in the art to combine Bertrand et al. and Hellberg et al. for the purpose of implementing selective filtering.

4. **Claims 2 and 4 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Bertrand et al. (US patent # 6,487,221 B1), Hellberg et al. (US patent # 6,611,855 B1), in view of Shalvi et al. (US patent # 6,647,070 B1).

The statement of "for a Wideband CDMA mode" as recited in lines 2 and 3 of claim 2 and lines 2 and 3 of claim 4, respectively, is not given weight by the examiner because it relates to how the intends to use.

Regarding claim 2, as followed by the limitations analyzed in claim 1, Bertrand et al. (US patent # 6,487,221 B1) and Hellberg et al. differ from the instant claimed invention that they do not show the step of first decimation filter may selectively implement a digital square-root-raised-cosine filter.

However, Shalvi et al. discloses (figure 1) that a matched filter (110) corresponding to a first decimation filter may selectively a square-root-raised-cosine filter (column 6, lines 36 – 43).

Therefore, from the preceding information, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Bertrand et al., Hellberg et al., and Shalvi et al. as providing the requirements of the instant claimed invention for handling different bandwidths, a flexible number of channels, simultaneous multiple standards, and a dynamic allocation of channels and standards (column 3, lines 5 – 15 of Hellberg).

Regarding claim 4, as followed by the limitations analyzed in claim 2, Bertrand et al., Hellberg et al., and Shalvi et al. differ from the instant claimed invention that they do not show

the step of including a controller that selectively programs the first decimation filter to provide an output.

However, Hellberg further discloses that "the selected bins are sent as packet, together with control information (column 5, lines 32 and 33) and the different filters have programmable parameters (column 2, lines 44 and 45). From the preceding information, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to recognize and implement Hellberg et al. and Shalvi et al. as providing the requirements of the instant claimed invention for handling different bandwidths, a flexible number of channels, simultaneous multiple standards, and a dynamic allocation of channels and standards (column 3, lines 5 – 15 of Hellberg).

5. **Claim 3 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Bertrand et al. (US patent # 6,487,221 B1), Hellberg et al. (US patent # 6,611,855 B1), Shalvi et al. (US patent # 6,647,070 B1 and further in view of Pearce (US patent # 5,341,135).

Regarding claim 3, as followed by the limitations analyzed in claim 2, Bertrand et al., Hellberg et al. and Shalvi et al. differ from the instant claimed invention that they do not show the step of the first and second decimation filters are programmable filters.

However, Pearce discloses (figure 4) that the decimation filter (25), the decimation filter (28), tap weight computation (17), and N tap FIR equaliser (14) corresponding to the first and second decimation filters are programmable filters (column 7, lines 32 – 49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Bertrand et al., Hellberg et al., Shalvi et al., and Pearce as providing the requirements of the instant claimed invention for providing both filters are programmable filters.

Allowable Subject Matter

6. **Claims 5 – 15 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. **Claims 16 – 18 and 20 - 30 are allowed.** The following is a statement of reasons for the indication of allowable subject matter:

Regarding to the claimed invention, the prior art of record fails to show or render obvious of a method and its corresponding apparatus, comprising:

Providing a first filtering stage and a second filtering stage;

Selectively programming the first stage to filter a W-CDMA signal or a GSM communication signal;

Using the second stage to filter the GSM communication signal;

Detecting the type of signal that has been received;

Adapting the first and second stages to the type of detected signal; and

Selectively using the first and second stages based on the type of the detected signal.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (571) 272-3010. The examiner can normally be reached on Monday through Friday from 8:00 AM to 17:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Vanderpuye Kenneth N. can be reached on (571) 272-3078. The fax phone numbers for this group is (571) 273-3021.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

DXN

August 08, 2005

KENNETH VANDERPUYE
PRIMARY EXAMINER